Affordability Proceeding: Phase 2 Staff Proposal

Low Income Oversight Board Briefing

December 15, 2021

California Public Utilities Commission

Procedural Background and Timeline

- 7/23/18 – OIR Issued
- 1/22/19 – Initial Workshop
- 8/20/19 – Staff Proposal
- 1/27/20 - Revised Staff Proposal
- 7/16/20 - D.20-07-032 adopted RSP with some modifications
    - Directed staff to develop Annual Affordability Report
    - Initiated Phase II
- November 2021 – Phase II Staff Proposal & Workshop
- Q1/Q2 2022 – Phase II Proposed Decision

Review of Phase 1

- Adopted affordability metrics and methodologies
- Ordered IOUs to submit quarterly cost and rate tracker tools
- Ordered issuance of an Annual Affordability Report

Affordability Ratio (AR)

$$\frac{\$ \text{ essential services bill}}{\$ \text{ household income} - \text{non-discretionary expenses (housing and other utilities)}} = \text{AR}$$

where utility services are least affordable for households at a particular point of the income distribution (e.g., AR_{20} is households at the lowest 20th percentile of income)

Hours at Minimum Wage (HM)

\# hours of earned employment at the local minimum wage needed to pay for essential services.

= **HM** *where low-income households will have the most difficulty paying for essential services, regardless of the socioeconomic condition of the neighbors.*

Socioeconomic Vulnerability Index (SEVI)

relative socioeconomic standing of a community (census tract) based on:

- poverty
- unemployment
- education
- percent of income spent on housing
- linguistic isolation

= **SEVI** *identifies communities least able to afford increases in essential services charges*

Phase II: Implementation of Metrics

- Affordability Ratio Calculator
  - Tool to compute AR values; available to stakeholders & staff
  - Essential usage bill levels and socioeconomic data updated annually
  - Includes a methodology for forecasting future socioeconomic conditions

- Identify vulnerable communities using metrics
  - Affordability Demarcations
  - Areas of affordability concern (AAC)
  - SEVI-DACs – variation of traditional disadvantage communities (DAC)

- Recommendations for implementation of metrics in decision-making
  - How and when should the affordability framework be used?
  - Develop implementation recommendations specific to each industry

Affordability Ratio Calculator

- Goal was to produce a publicly-available tool that will allow for calculation of AR at a geographically granular level based on current conditions as well as hypothetical future utility bills

- Tool will leverage Department of Finance forecasts to estimate changes in income levels and housing costs across different regions of the state

- Socioeconomic data (household incomes and housing costs) from US Census Bureau, as well as DoF forecast data, will be refreshed every year; updated tool will be issued alongside Annual Affordability Report

- Users will be able to input expected Essential Usage Bills (bills based on essential level of utility services) for future years to estimate changes in affordability

ARC Example: SCE 2021 GRC Track 3 - Inputs

		Basic Service			
	Electric Provider and Climate Zone	2020 Essential Usage Bill ($/month)	2021 Essential Usage Bill ($/month)	2022 Essential Usage Bill ($/month)	2023 Esse Bill ($/
1	PG&E Y	80.04	81.58	83.61	
2	PG&E Z	51.42	52.40	53.71	
3	Pittsburg Power Company	89.53	91.25	93.52	
4	Plumas-Sierra Rural Elec Coop	72.39	73.79	75.62	
5	Sacramento Municipal Util Dist	68.24	69.56	71.29	
6	SCE 10	82.37	104.29	108.24	
7	SCE 13	88.75	112.06	116.31	
8	SCE 14	80.27	101.47	105.31	
9	SCE 15	125.83	156.79	162.75	
0	SCE 16	73.93	94.17	97.73	
1	SCE 5	100.87	129.48	134.39	
2	SCE 6	63.30	80.99	84.04	
3	SCE 8	63.15	80.51	83.55	
4	SCE 9	76.96	97.70	101.40	

	A	M	N	O	P
		All-Electric Service			
	Electric Provider and Climate Zone	2020 Essential Usage Bill ($/month)	2021 Essential Usage Bill ($/month)	2022 Essential Usage Bill ($/month)	2023 Essential Bill ($/mont
1	PG&E Y	139.89	142.59	146.14	1
2	PG&E Z	88.90	90.61	92.86	
3	Pittsburg Power Company	89.53	91.25	93.52	
4	Plumas-Sierra Rural Elec Coop	72.39	73.79	75.62	
5	Sacramento Municipal Util Dist	68.24	69.56	71.29	
6	SCE 10	95.30	118.18	122.66	1
7	SCE 13	140.42	173.27	179.86	1
8	SCE 14	116.59	144.32	149.79	1
9	SCE 15	114.73	143.37	148.82	1
0	SCE 16	114.46	141.49	146.86	1
1	SCE 5	145.96	180.10	186.95	1
2	SCE 6	66.61	82.87	86.00	
3	SCE 8	67.42	83.81	86.98	
4	SCE 9	78.50	97.47	101.15	1

ARC Example: SCE 2021 GRC Track 3 – Climate Zone Level Outputs

	A	B	C
1	Currently selected year:		2021
2	Electric Climate Zone	Weighted Avg Electric AR_{20}	Weighted Avg Electric AR_{50}
55	SCE 10	8.64%	2.43%
56	SCE 13	13.00%	3.70%
57	SCE 14	14.97%	3.11%
58	SCE 15	19.07%	4.61%
59	SCE 16	8.96%	2.62%
60	SCE 5	15.54%	3.17%
61	SCE 6	6.97%	1.64%
62	SCE 8	7.90%	1.94%
63	SCE 9	9.67%	2.09%

Currently selected year:		2022
Electric Climate Zone	Weighted Avg Electric AR_{20}	Weighted Avg Electric AR_{50}
SCE 10	8.61%	2.44%
SCE 13	13.15%	3.74%
SCE 14	14.91%	3.12%
SCE 15	19.00%	4.62%
SCE 16	9.00%	2.64%
SCE 5	15.73%	3.21%
SCE 6	6.99%	1.65%
SCE 8	7.89%	1.95%
SCE 9	9.63%	2.10%

ARC Example: SCE 2021 GRC Track 3 – Sub-Climate Zone Level Outputs

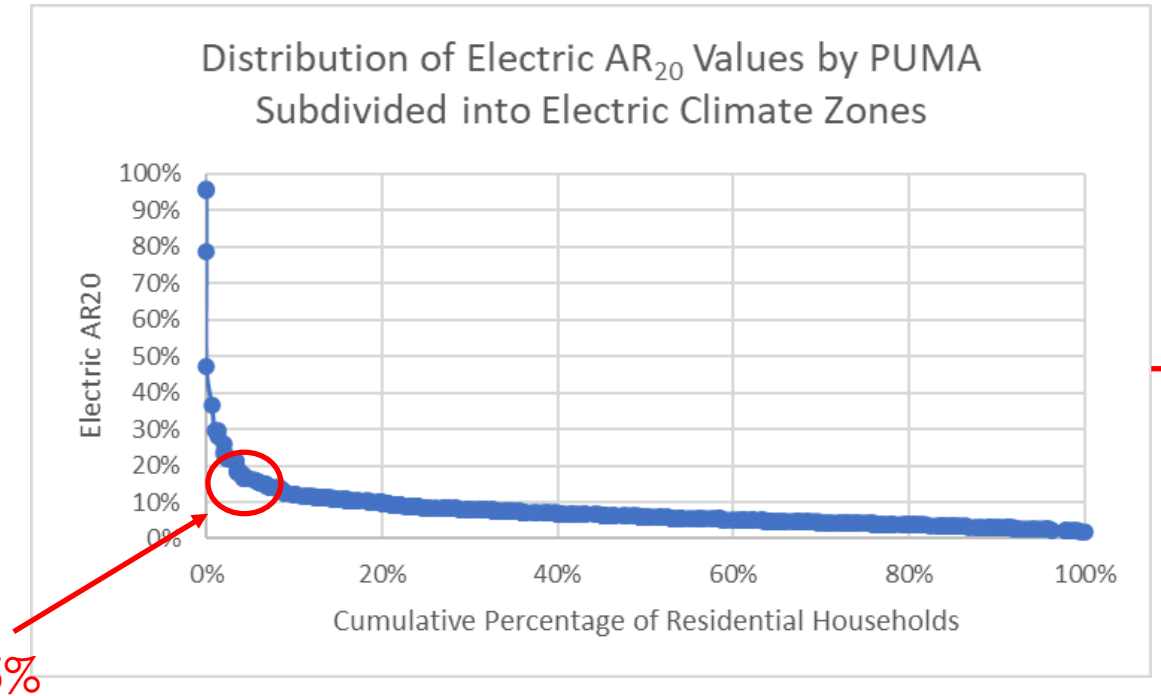
	A	B	C	D	E	F	G
1	Currently selected year:		2021				
2	PUMA	County/City	Electric Climate Zon	PUMA/Electric Climate Zon	Electric AR	Electric AR	Estimated # of Housing Uni
31	00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 14	00300, SCE 14	7.60%	2.69%	33
32	00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 15	00300, SCE 15	11.16%	3.96%	562
33	00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 16	00300, SCE 16	7.55%	2.64%	19896
102	01907	Fresno County (East)--Sanger, Reedley & Parlier Cities PUMA	SCE 16	01907, SCE 16	9.07%	3.00%	2496

A	B	C	D	E	F	G
Currently selected year:		2022				
PUMA	County/City	Electric Climate Zon	PUMA/Electric Climate Zon	Electric AR	Electric AR	Estimated # of Housing Uni
00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 14	00300, SCE 14	7.69%	2.72%	33
00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 15	00300, SCE 15	11.29%	4.01%	562
00300	Alpine, Amador, Calaveras, Inyo, Mariposa, Mono & Tuolumne Counties PUMA	SCE 16	00300, SCE 16	7.63%	2.68%	19896
01907	Fresno County (East)--Sanger, Reedley & Parlier Cities PUMA	SCE 16	01907, SCE 16	9.17%	3.04%	2496

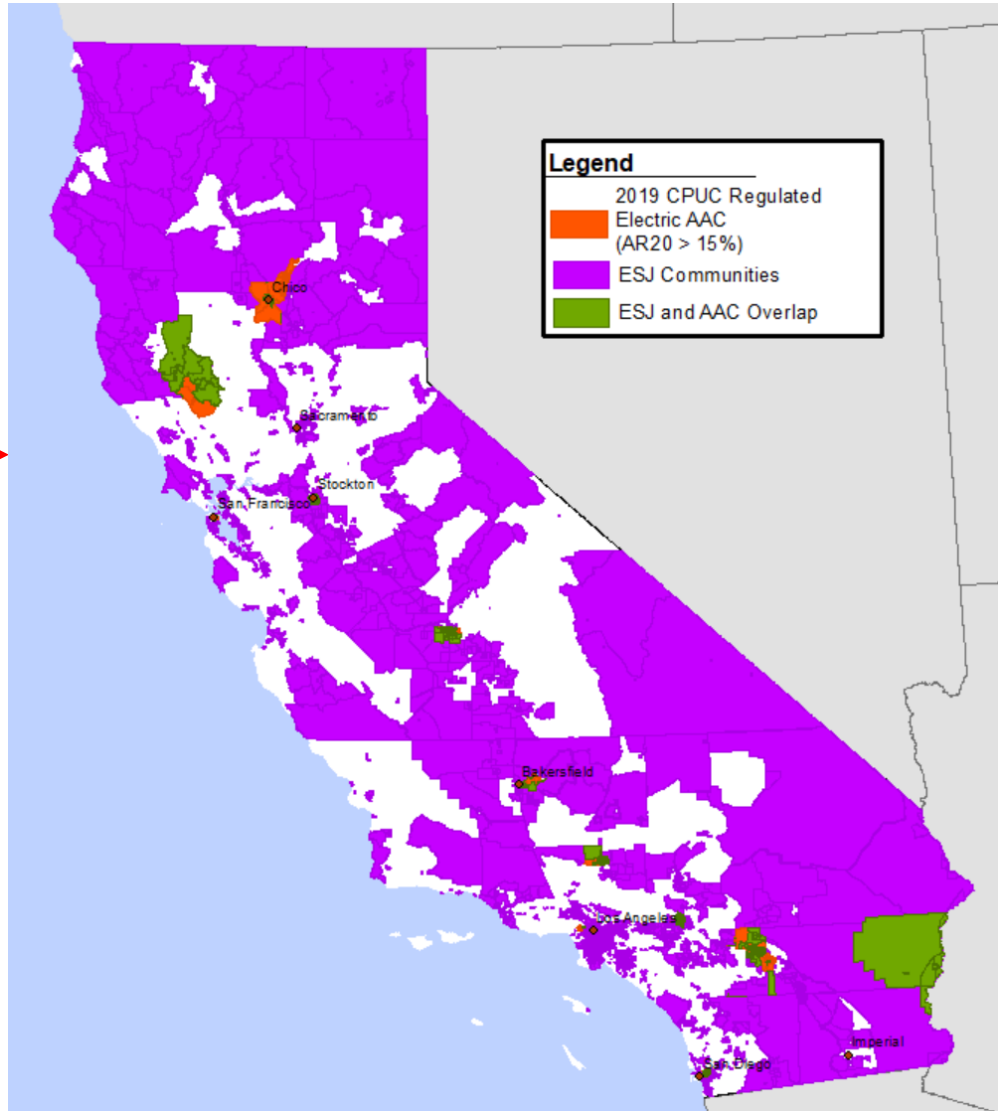
Identify Vulnerable Communities

- Developed concepts to help provide context for AR and SEVI metrics, as well as identify vulnerable communities:
  - Affordability Demarcations – Inflection points in industry-specific statewide AR_{20} distribution plots which are used to identify AR_{20} values that are relatively high
  - Areas of Affordability Concern (AAC) – areas where AR_{20} is higher than Affordability Demarcations (specific to each industry)
  - SEVI-DACs – census tracts with SEVI scores in the top 25%; variation of traditional DACs (census tracts with CalEnviroScreen scores in top 25%)
- List of census tracts that meet the definitions of AAC and SEVI-DACs will be published annually alongside Annual Affordability Report

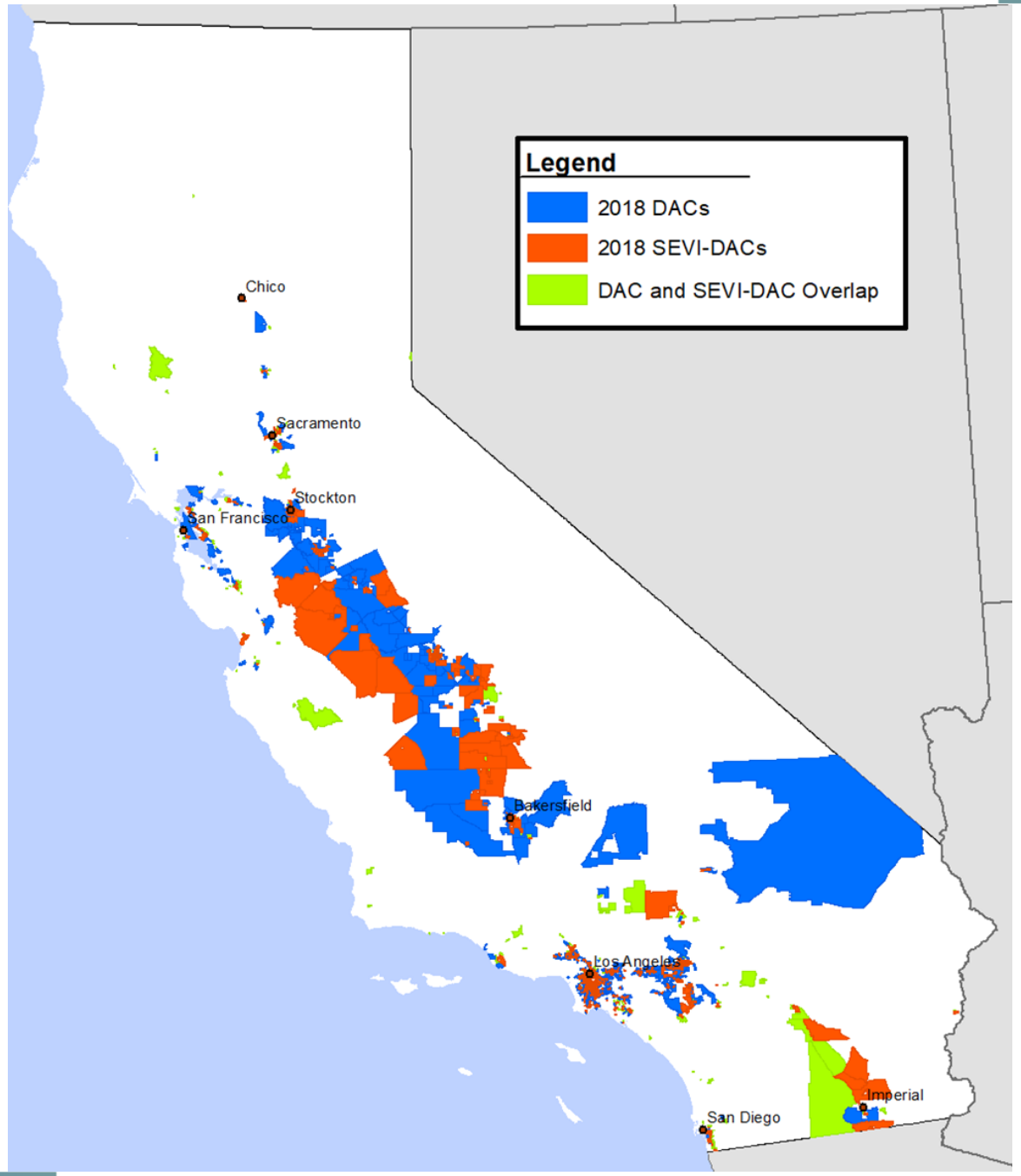
Areas of Affordability Concern (AAC)



Industry	Inflection Point %
Electric	15%
Gas	10%
Water	10%
Communications	15%



SEVI-DACs

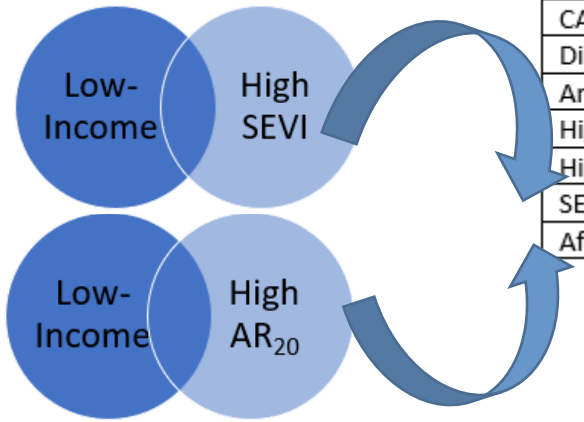

Legend
2018 DACs
2018 SEVI-DACs
DAC and SEVI-DAC Overlap
Chico
Sacramento
Stockton
San Francisco
Bakersfield
Los Angeles
Imperial
San Diego

Energy Division Implementation Proposal - Understanding Affordability of Proposed Rate Increases (Use Case #1)

- Implementation proposal centers on an **affordability analysis**
- What is an affordability analysis?
  - calculation of the affordability metrics for a single proceeding only
  - interpretation of the metrics calculated
- Who is responsible for presenting the affordability analysis?
  - The large energy IOUs and the Small and Multi-Jurisdictional Utilities (SMJU) present calculations and interpretation
  - other stakeholders, including intervenors in proceedings, may provide additional interpretation
- When is an affordability analysis required?
  - all General Rate Cases (GRC) when application is filed
  - other non-GRC utility ratesetting applications with a proposed revenue requirement increase greater than one percent
  - updated affordability analysis may be required at other points during the proceeding

Energy Division Implementation Proposal - Using affordability metrics to prioritize program resources for eligible customers (Use Case #2)

- Recent Energy Savings Assistance (ESA) Decision (D.21-06-015) serves as a model for how metrics can be used in proceedings for geographic targeting of resources:
  - Required IOUs to file a joint Tier 2 advice letter detailing what level of no-cost energy efficiency treatment measures (basic, enhanced, or advanced) would be offered to different low-income customer segments and provided a "menu" of customer segments to consider.



By Financials[53]	By Location	By Health Condition
CARE	DAC	Medical Baseline
Disconnected	Rural	Respiratory
Arrearages	Tribal	Disabled
High Usage	PSPS Zone	
High Energy Burden	Wildfire Zone	
SEVI	Climate Zone	
Affordability Ratio	CARB Communities	

  - The ESA Decision provides a new model for looking at the customer segmentation process and explicitly considers that this model may be enhanced by the affordability metrics.

Water Industry Implementation

- Affordability Metrics Calculations
- Affordability Analysis
- Rate and Bill Impact Tracker

Affordability Metrics Calculations

- Affordability calculations in proceedings and advice letters
  - Class As – submit affordability calculations with revenue impact >1%
    - From Rules of Practice & Procedure 3.2
    - AR using AR Calculator, HM calculated by utilities
  - Required with application/AL submittal, with proposed Settlement Agreement, and before PD/draft resolution
  - "Final" calculations may be performed by WD staff if rates are confidential

Affordability Analysis

- In addition to calculation, formal proceedings should include discussion/interpretation of the metrics, including:
  - Discuss how affordability will change as a result of the request
  - Compare metrics for current rates to metrics after the proposed change
  - Justify the change in affordability in relation to the need for a rate increase
  - Discuss AR scores in relation to the median among all similar service territories (Class A ratemaking areas)
    - Median values to be provided in Annual Affordability Reports
  - Provide recommendations for improving affordability
    - Include actions by the utility & actions by the CPUC

Rate and Bill Impact Tracker

- Draft template developed by Public Advocates Office
  - Included in Phase II scope by September 10, 2020 Motion to Amend
- Recommend each Class A submit in next GRC, and update with each rate increase thereafter
- Working sessions with Class As to refine and improve tool
  - Suggestions/recommendations/comments

Appendix: Phase III Schedule

Tentative Phase III Timeline

- September 2021 – Fourth Amended Scoping Memo
- October 2021 – Prehearing Conference
- December 2021 – Scoping Memo and Ruling Soliciting Party Presentations to be considered at Electric Rates Workshop
- February 2022 – Electric Rates Workshop
- May 2022 – Ruling Soliciting Proposals on Strategies to Mitigate Electric Rate Increases
- August 2022 – Party Proposals Served
- September 2022 – Party Opening and Reply Comments on Proposals
- Q4 2022 – Staff Proposal
- Q2 2023 – Phase III PD